SIEMENS

SIREMOBIL Iso-C

SP

Maintenance Protocol

System

SIREMOBIL Iso-C

Customer:	
Address:	
Department:	
Room:	
Contact person:	
Telephone:	
Cust. specific no.:	
Cust. no.:	
Date.:	

The instructions SPR2-230.101.02.06.02 are required for this protocol

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Print No.: SPR2-230.105.02.06.02
Replaces: SPR2-230.105.02.05.02

English
Doc. Gen. Date: 07.05

SIEMENS Office:	
Address:	
Region:	
Country:	
Contact person:	
Tel.:	
CSE in charge:	
Tel.:	

Remarks Regarding the Protocol:

The protocol is valid as proof of quality for **one** check that must be performed on the system / component in one year.

The check must be performed in the specified intervals.

The results of the check are entered in this protocol.

The chapter numbers in front of the checkpoints indicate the corresponding chapters in the particular instructions (see cover page).

The protocol must be completely filled out by the Customer Service Engineer, i.e.:

- All boxes must be filled out. If a box does not apply to the system or if no entry needs to be made, check the “n.a.“ box.
- Enter the customer number (Cust. No.:) and the date of the check in the header of each page so that each page can be allocated to a customer and to a check date.
- If there are complaints, the IVKs for the component about which a complaint has been made as well as the type of complaint must be entered in the “Open Points“ table provided for this. Correction of these open points also must be documented in this table with the date and a signature. If there are no open points, check “No“ and document this with the date and a signature.
- If movable components (also test phantoms that are part of the system) that can be used in different systems are used for the check, they must be entered in the “Movable Components“ table provided for this.
- The measurement values for the measurements that must be performed during the check must also be entered in the open spaces / tables provided for them.
- After completing the check, Page 3 of this protocol must be filled out and signed.

Further Processing and Archiving of the Protocol

The protocol is a document and thus must be archived. After completing the test, it must be filed in the corresponding register in the “System Owner Manual“ binder. If needed, a copy can be handed to the customer.

System:	
Serial No.:	
Software Version:	
Number of the Service Contract:	
Type of Maintenance:	

Evaluating the Condition of the System / Component

The system has no deficiencies. The image quality test resulted in no differences from required reference values.	☐
The system / component has slight deficiencies that have no affect on continued operation of the system. However they should be corrected preventively. The image quality test resulted in no differences from required reference values.	☐
The system / component has serious deficiencies. For safety reasons, continued operation of the system is permitted only after successfully correcting the deficiencies.	☐

After completing all work steps, an evaluation was performed.

Signature: _____

Date: Name:

The operator or a person assigned for this has taken note of this evaluation.

(if national regulations require this)

Signature: _____

Date: Name:

Explanation of Abbreviations in the Protocol

Abbrev.	Explanation		Abbrev.	Explanation
SI	Safety Inspection		PMF	Preventive Maintenance, Operating Value Check, Function Check
SIE	Electrical Safety Inspection		Q	System Quality, Image Quality
SIM	Mechanical Safety Inspection		QIQ	Image Quality
PM	Preventive Maintenance		QSQ	System Quality Check
PMP	Periodic Preventive Maintenance		SW	Software Maintenance
PMA	Preventive Maintenance Adjustments		CSE	Customer Service Engineer

Additional activities performed

Only activities that are not described in the instructions for the system / component need to be listed.

	Date:		
Additional activities performed:	OK	not OK	n.a.
	☐	☐	☐
	☐	☐	☐

Open Points:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If “Yes“, enter the component with the IVK and the open point (only the number) in the table. After completing maintenance, record this in the table.

IVK	Component	Open Points	Completed	
			Date	Signature

Measuring Devices queried electronically:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If the measurement devices are queried electronically, for example with a Scout Mobile Device, entry of the measuring devices in the table can be skipped.

Measuring Devices	Type	Serial No.	Date Used	Next Calibration Due

Movable Components:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If “Yes“, enter the movable component with which the check was performed along with the with the Serial No. in the table.

Movable components (also test phantoms that are part of the system) are parts that can be used on different systems).

Component	Serial No.

OK not OK | n.a.

1 General Information

2 Inspection of Exterior and Surroundings

2.1 Visual inspection of exterior

PMP	Damage to the system	☐	☐	☐
PMP	Damage to the mains connection	☐	☐	☐

2.2 Inspection of environment

2.2.1 Power outlets

SIE	Damage	☐	☐	☐
SIE	Mains voltage	☐	☐	☐
SIE	Internal line impedance	☐	☐	☐

3 Safety Inspection

3.1 Mechanical safety

SIM	Cover panels	☐	☐	☐
SIM	Cable deflectors	☐	☐	☐
SIM	Foot brake	☐	☐	☐
SIM	Brakes	☐	☐	☐
SIM	C-arm	☐	☐	☐
SIM	Wheels	☐	☐	☐
SIM	Lifting column	☐	☐	☐
SIM	Emergency Stop switch	☐	☐	☐

3.1.1 I.I. laser light localizer

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIM	Mechanical system	☐	☐	☐
SIM	Function	☐	☐	☐

3.1.2 Laser light localizer

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIM	Mechanical system	☐	☐	☐
SIM	Function	☐	☐	☐

OK not OK n.a.

3.1.3 DICOM bridge

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIM Mounting ☐☐☐

3.1.4 Codonics printer

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIM Mounting ☐☐☐

SIM Guide rails ☐☐☐

3.1.5 Navigation system

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIM Navigation system ☐☐☐

3.1.6 Monitor(s)/displays

Present: Yes: ☐ Material No.:

No: ☐ Serial No.:

Signature: _____

Date: Name:

SIM Monitor(s)/displays ☐☐☐

3.1.6 Monitor(s)/displays

Present: Yes: ☐ Material No.:

No: ☐ Serial No.:

Signature: _____

Date: Name:

OK not OK n.a.

SIM Monitor(s)/displays ☐ ☐ ☐

3.1.7 Labels

SIM Warning signs ☐ ☐ ☐

SIM ID labels ☐ ☐ ☐

3.2 Electrical safety

SIE Cables and plugs ☐ ☐ ☐

SIE Fluoroscopic timer ☐ ☐ ☐

SIE Audible warning signal ☐ ☐ ☐

SIE Radiation indicators ☐ ☐ ☐

SIE Radiation release switch ☐ ☐ ☐

SIE Compulsory radiation switch off ☐ ☐ ☐

SIE Dose rate ☐ ☐ ☐

SIE Iris collimator ☐ ☐ ☐

SIE Area-dose product measuring device ☐ ☐ ☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

SIE Codonics printer cable break ☐ ☐ ☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

3.2.1 Monitor(s)/displays

Present: Yes: ☐ Material No.:

No: ☐ Serial No.:

Signature: _____

Date: Name:

SIE Monitor(s)/displays ☐ ☐ ☐

3.2.1 Monitor(s)/displays

OK not OK n.a.

Present: Yes: ☐ Material No.:

No: ☐ Serial No.:

Signature:

Date: Name:

SIE Monitor(s)/displays ☐☐☐

3.3 Operation

SIE Check the operating functions ☐☐☐

3.4 3D reconstruction

Option present: Yes: ☐ No: ☐

Signature:

Date: Name:

SIE 3D reconstruction ☐☐☐

SIE 3D reconstruction with navigation system ☐☐☐

3.5 Conductive rubber

SIE SIREMOBIL stand voltage discharge rubber ☐☐☐

SIE Monitor trolley voltage discharge rubber ☐☐☐

3.6 Measurements

SIE Protective conductor test (performed under "Final Work Steps") ☐☐☐

SIE Leakage current test (performed under "Final Work Steps") ☐☐☐

4 Maintenance, Operating Value / Functional Inspection

4.1 Maintenance

PMP Cleaning the system ☐☐☐

PMP System ventilation ☐☐☐

PMP Memoskop ventilation ☐☐☐

4.1.1 DICOM bridge

Option present: Yes: ☐ No: ☐

Signature:

Date: Name:

OK not OK n.a.

PMP Ventilation ☐☐☐

4.1.2 Codonics printer

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMP Ventilation ☐☐☐

PMP Cleaning ☐☐☐

4.2 Operating value inspection

PMF Error memory ☐☐☐

4.3 Functional inspection

PMF Video printer ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF Video recorder ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF Laser camera system "Sneaker Net" ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF DICOM bridge ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

OK not OK n.a.

PMF DICOM Connect ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF Codonics printer manual control panel ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF 4 View ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF Laser camera connection ☐☐☐

Option present: Yes: ☐ No: ☐

Signature: _____

Date: Name:

PMF Image rotation ☐☐☐
PMF Slot diaphragm ☐☐☐
PMF Monitor display of the iris collimator aperture ☐☐☐
PMF Monitor display of the slot diaphragm positions ☐☐☐

5 Final Result / Quality Inspection and General Maintenance

SIE Image quality (IQ) quick test ☐☐☐
SIE DICOM bridge IQ test ☐☐☐
SIE Codonics printer IQ test ☐☐☐
PMP Maintenance ☐☐☐

5.1 Final Work Steps

SIE Protective conductor test ☐☐☐
SIE Protective conductor resistance ☐☐☐

OK not OK | n.a.

Test circuit per VDE 0751-1:			
Test point 1:		Measurement value 1:	
Test point 2:		Measurement value 2:	
Test point 3:		Measurement value 3:	
Test point 4:		Measurement value 4:	
Test point 5:		Measurement value 5:	
Test point 6:		Measurement value 6:	
Test point 7:		Measurement value 7:	
Test point 8:		Measurement value 8:	

SIE Leakage current ☐☐☐

Messkreis gemäß VDE 0751-1:		
Measured value:		mA
Power line voltage:		V
Corrected value:		mA